

Abstract

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The present invention describes a method and devices for producing screened coatings on flexible sheeting such as wovens, knits and non-wovens, mainly used in garment fabrication, with hot-melt adhesives by screened imprinting a paste forming a barrier-layer, subsequent powdering with a hot-melt adhesive powder and removing the excess powder not adhering to the paste imprint, whereby the paste is filled into the recesses of an engraved roll or from outside into the perforations in a round screening stencil and subsequently mostly only part of this paste filling being applied localized to the applied sheeting and separately in time from the filling. This is followed by powdering with the hot-melt adhesive powder, removal of the excess powder not adhering to the paste impression, and a drying and sintering procedure. Transfer of the paste from the engraved roll to the coating substrate is done in contact with the backing roll. In the second method, in filling the perforations in the screening stencil, use is made of a stencil ground smooth on the outside and the perforations are simply filled from outside without the paste being pressed through to the inner side of the screening stencil. Using an inner knife, with no presentation of paste, the paste is transferred to the coating substrate with the aid of a rubberized backing roll located under the screening stencil.

The resulting double coating of a barrier layer and hot-melt adhesive layer covers practically totally the surface of the substrate, requires extremely little amounts of coating whilst being free of back clinching and uniform in its application weight. The low adhesive requirement with hardly any differencing reduces the costs involved and achieves added softness of the setting feel for a good, or even enhanced, adhesion as compared to all coating methods known hitherto.